Winter \*\*

### Flood Control Project Maintenance Levee Inspections

# **LMA District Cover Sheet**

**Spring 2018 Levee Inspection Results** 

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Spring

Summer \*\*

Fall

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)				
	** Non-receipt of Summ Reports may effect o			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rate	e ratings are not detern d using the same crite			ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			ation and maintenance de ended to be an indiction o	
Comments				

### **Unit Cover Sheet**

**Spring 2018 Levee Inspection Results** 

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles
Unit No. 01 Sutter Bypass Levee	Left	21.68

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/27/2018 - 3/27/2018			
DWR Inspector	Bob Duffey			
Accompanied By	Steve Beckley Sutter Maintenance Yard			

### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				0		0
DWR ID	DWR_ST0	002_01_s _ 201	3_4				
		Comn	nent Cod	de			
		1	0	1			
		Inspecto	or Comm	nent			
The LMA has the O&M manuals.							

No Photos

LM Start		Rating **	Α	Issue No.		5							
LM End		Issue Type +	Ma	Location *		N/A							
Category	Earthen L	evee		GPS L	atituc	de/Longitude							
Calegory				Start		End							
Item		cy Supplies &			0		0						
item	Equipment				0		0						
DWR ID	DWR_ST0	002_01_s _ 201	3_5										
		Comn	nent Cod	de									
		Inspecto	or Comm	nent		Inspector Comment							

The LMA has flood fight supplies and equipment.

The LMA has completed flood flight training.

No Photos

LM Start		Rating **	Α	Issue No.		6	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Flood Pre	Flood Preparedness & Training			0		0
iteiii					0		0
DWR ID	DWR_ST0	002_01_s _ 201	3_6				
	Comment Code						

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	0.32	Rating **	М	Issue No.		62
LM End	0.32	Issue Type +	En	Location *		
Catagony	Supplemental			GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		39.14746	3°	39.147463°
пеш				-121.82871	3°	-121.828716 °
DWR ID						

Comment Code

### Inspector Comment

FS\_ID:51556 DS\_ID:16859 EP\_NO: 4795

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 Unable to locate. (DWR Sutter Yard-AFreitag)10/10/2016 Unable to locate.4/18/2016 Unable to

locate.5/7/2015 Could not locate a marker for this

crossing.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2103 Same as last inspection.5/22/2013 Same as last inspection. Unable to locate.10/8/2012 Unable to locate any indicator of crossing. More research may be necessary. FIELD\_STRUCT\_DESC: 3-inch gas line of an unknown material along the landside (LS) toe, at an unknown depth. (Permit No. 4795, 1965 Pacific Gas and Electric Company [PG&E]). [Additional Reference(s):

DWR Levee Log, 2005].

FS Date: 4/13/2017 12:41:48 PM

Photo 1 of 1 : SP_2018	_ST0002_450_4	42_20180305_00012.jpg

No Photos



View of the erosion along the waterside toe.

LM Start	0.36	Rating **	M	Issue No.		42		
LM End	0.36	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Erosion /	Bank Caving		39.1471	83°	39.147183 °		
пеш				-121.8281	42 °	-121.828142 °		
DWR ID	DWR ID DWR_ST0002_01_s _ 2017_42							
		Comn	nent Cod	le				
E1 : Note a	and monito	or erosion site						
	Inspector Comment							
Repair the erosion along the water side toe.								

Location LS : Land Side N/A: Not Applicable WS: Water Side CR: Crown

Rating A: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.11	Rating **	М	Issue No.		46		
LM End	1.11	Issue Type +	Ма	Location *	WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
			Start		End			
Encroachments			39.1408	17°	39.140817°			
item				-121.816848 °		-121.816848 °		
DWR ID	RID DWR_ST0002_01_s _ 2018_46							
		Comn	nent Cod	le				
GA : Garba	age							
			_					
		Inspecto	or Comm	nent				
Remove th	ne garbage	from the water	erside sl	ope.				

Photo 1 of 1 : SP\_2018\_ST0002\_450\_46\_20180403\_00078.jpg

View of the garbage along the waterside slope.

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.12	Rating **	М	Issue No.		63	
LM End	1.12	Issue Type +	En	Location *			
Catagony	Category				GPS Latitude/Lo		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.14086	B°	39.140868 °	
пеш				-121.81664	4 °	-121.816644°	
DWR ID							

## Comment Code

### Inspector Comment

FS ID:51560 DS\_ID:16862 EP NO: 10932

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Riser knocked out of place on WS shoulder and no sign of the siphon breaker. Suspect it was buried. (DWR Sutter Yard- AFreitag)10/10/2016 WS CMP riser is still knocked out of place and siphon breaker is suspected to be buried.(DWR Sutter Yard - afreitag)4/18/2016 CMP riser is still knocked out of place and a siphon breaker cannot be found.5/7/2015 24in. cmp riser and siphon breaker were not found on the WS shoulder.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 24in. cmp riser was pulled out of levee and there is no sign of a siphon breaker on WS shoulder.5/22/2013 24in. cmp riser on WS shoulder is full of garbage and dirt and should be cleaned out to inspect siphon breaker.10/8/2012 Pier has no walkway to access pump on pier. This is not necessarily an issue. FIELD STRUCT DESC: 16-inch coated steel irrigation pipe through the levee, 6.3 feet below the crown. Vertical pump mounted on a steel structure on the bank. Siphon breaker in a 24-inch corrugated metal pipe riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). Power and communication joint pole (JP) on the WS shoulder. Original equipment in O&M. Hand drawings available in permit. (Original O&M entry removed in 1975 and replaced under Permit No. 10932, 1976 - Edward Nall) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 1094+80)]. FS Date: 4/13/2017 12:49:52 PM

Photo 1 of 3: UCIP\_SP\_2018\_51560\_64805.jpg



Pump on metal pier on WS slope.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.12	Rating **	М	Issue No.		63 (cont)
LM End	1.12	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.14086	8°	39.140868 °
пеш				-121.81664	4 °	-121.816644°
DWR ID						

# Comment Code

### Inspector Comment

FS\_ID:51560 DS\_ID:16862 EP\_NO: 10932

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Riser knocked out of place on WS shoulder and no sign of the siphon breaker. Suspect it was buried. (DWR Sutter Yard- AFreitag)10/10/2016 WS CMP riser is still knocked out of place and siphon breaker is suspected to be buried.(DWR Sutter Yard - afreitag)4/18/2016 CMP riser is still knocked out of place and a siphon breaker cannot be found.5/7/2015 24in. cmp riser and siphon breaker were not found on the WS shoulder.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 24in. cmp riser was pulled out of levee and there is no sign of a siphon breaker on WS shoulder.5/22/2013 24in. cmp riser on WS shoulder is full of garbage and dirt and should be cleaned out to inspect siphon breaker.10/8/2012 Pier has no walkway to access pump on pier. This is not necessarily an issue. FIELD STRUCT DESC: 16-inch coated steel irrigation pipe through the levee, 6.3 feet below the crown. Vertical pump mounted on a steel structure on the bank. Siphon breaker in a 24-inch corrugated metal pipe riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). Power and communication joint pole (JP) on the WS shoulder. Original equipment in O&M. Hand drawings available in permit. (Original O&M entry removed in 1975 and replaced under Permit No. 10932, 1976 - Edward Nall) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 1094+80)]. FS Date: 4/13/2017 12:49:52 PM

# Photo 2 of 3: UCIP\_SP\_2018\_51560\_64804.jpg



24-inch CMP riser on WS slope.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.12	Rating **	М	Issue No.		63 (cont)
LM End	1.12	Issue Type +	En	Location *		
Category Supplemental				GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UC	DWR UCIP Field Study			68°	39.140868°
пеш				-121.8166	44 °	-121.816644°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:51560 DS\_ID:16862 EP\_NO: 10932

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Riser knocked out of place on WS shoulder and no sign of the siphon breaker. Suspect it was buried. (DWR Sutter Yard- AFreitag)10/10/2016 WS CMP riser is still knocked out of place and siphon breaker is suspected to be buried.(DWR Sutter Yard - afreitag)4/18/2016 CMP riser is still knocked out of place and a siphon breaker cannot be found.5/7/2015 24in. cmp riser and siphon breaker were not found on the WS shoulder.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 24in. cmp riser was pulled out of levee and there is no sign of a siphon breaker on WS shoulder.5/22/2013 24in. cmp riser on WS shoulder is full of garbage and dirt and should be cleaned out to inspect siphon breaker.10/8/2012 Pier has no walkway to access pump on pier. This is not necessarily an issue. FIELD STRUCT DESC: 16-inch coated steel irrigation pipe through the levee, 6.3 feet below the crown. Vertical pump mounted on a steel structure on the bank. Siphon breaker in a 24-inch corrugated metal pipe riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). Power and communication joint pole (JP) on the WS shoulder. Original equipment in O&M. Hand drawings available in permit. (Original O&M entry removed in 1975 and replaced under Permit No. 10932, 1976 - Edward Nall) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 1094+80)]. FS Date: 4/13/2017 12:49:52 PM

Photo 3 of 3: UCIP\_SP\_2018\_51560\_64803.jpg



7'X7' concrete distribution box on LS toe.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.53	Rating **	U	Issue No.	57		
LM End	1.53	Issue Type +	Ma	Location *	WS		
Catagonia Earthen Levee				GPS La	atitud	le/Longitude	
Category			Start		End		
Item	Erosion / Bank Caving			39.1373	73°	39.137373°	
item			-121.8103	82 °	-121.810382°		
DWR ID	DWR_ST0	002_01_f _ 2017	7_57				
		Comn	nent Cod	le			
E2 : Schedule repair of erosion site prior to the next inspection.							
Inoncator Commant							

Inspector Comment
Repair the beaver hole along the waterside berm.



View of the beaver hole along the waterside berm.

LM Start	1.57	Rating **	U	Issue No.		58
LM End	1.57	Issue Type +	Ma	Location *		WS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Erosion /	Erosion / Bank Caving			10°	39.137010°
item				-121.8096	73 °	-121.809673°
DWR ID	DWR_ST0	002_01_f _ 2017	7_58			

### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Repair the beaver hole along the waterside berm.



View of the beaver hole along the waterside berm.

LM Start	1.61	Rating **	U	Issue No.		61	
LM End	1.61	Issue Type +	Ма	Location *		WS	
Category	GPS Latitude/Longitude						
Calegory				Start		End	
Item	Erosion /	Erosion / Bank Caving			3°	39.136713	0
пеш				-121.80920	2 °	-121.809202	0
DWR ID	DWR_ST0	002_01_f _ 2017	<b>7_</b> 61				

### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Repair the beaver hole along the waterside berm.



View of the beaver hole along the waterside berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	3.54	Rating **	С	Issue No.		30	
LM End	3.54	Issue Type +	Ма	Location *		LS	
	Category Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	Animal Control			7°	39.120417°	
item			-121.77986	3 °	-121.779863 °		
DWR ID	DWR_ST0002_01_f _ 2015_30						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

The rodent holes was repaired along the landside slope.

No Photos

LM Start	3.55	Rating **	A/W	Issue No.		64	
LM End	3.55	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.12037	2°	39.120372 °	
item				-121.77980	o°	-121.779800 °	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51566 DS\_ID:16880 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culverts are still being used as gravity drains for the LS ditch.11/12/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/30/2103 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Flap gates left in open position. Unable to determine type of abandonment for concrete culverts. Contact inspector to determine type of abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 3] 1 of 2: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 30 feet below the crown. Slide gate in concrete well on the landside (LS) shoulder. Wood flap gate and concrete headwall on the waterside (WS) end. Abandoned State pumping plant on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 966+30)].

FS Date: 4/13/2017 1:10:49 PM

### Photo 1 of 3: UCIP\_SP\_2018\_51566\_64815.jpg



Slide gates on LS shoulder.

* Location	** Rating		+ Issue Type	
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	3.55	Rating **	A/W	Issue No.		64 (cont)
LM End	3.55	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UC	DWR UCIP LMA Responsibility			2°	39.120372°
пеш				-121.77980	o°	-121.779800°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:51566 DS\_ID:16880 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culverts are still being used as gravity drains for the LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2103 Same as

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FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 3] 1 of 2: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 30 feet below the crown. Slide gate in concrete well on the landside (LS) shoulder. Wood flap gate and concrete headwall on the waterside (WS) end. Abandoned State pumping plant on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 966+30)].

FS Date: 4/13/2017 1:10:49 PM



### Photo 2 of 3: UCIP\_SP\_2018\_51566\_64814.jpg



Flap gates on WS toe.

### Photo 3 of 3: UCIP\_SP\_2018\_51566\_64813.jpg



Abandoned pumphouse and sump on LS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	3.55	Rating **	A/W	Issue No.		65
LM End	3.55	Issue Type +	Ma	Location *		
Category	Suppleme		GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCIP LMA Responsibility				8°	39.120358°
пеш				-121.77977	'5 °	-121.779775 °
DWR ID						

### Inspector Comment

Comment Code

FS\_ID:51567 DS\_ID:16895 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culverst still being used as gravity drains for LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2103 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Flap gates in open position. Need to determine type of abandonment. Contact inspector to determine abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 3] 2 of 2: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 30 feet below the crown. Slide gate in concrete well on the landside (LS) shoulder. Wood flap gate and concrete headwall on the waterside (WS) end. Abandoned State pumping plant on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 966+30)].

FS Date: 4/13/2017 1:16:13 PM

LM Start	3.55	Rating ** A/W		Issue No.	65 (cont)
LM End	3.55	Issue Type +	Ma	Location *	

# Photo 1 of 3: UCIP\_SP\_2018\_51567\_64819.jpg



Slide gate valves on LS shoulder.

### Photo 2 of 3: UCIP SP 2018 51567 64818.jpg



Flap gates on WS toe.

* Location	** Rating		+ Issue Type	
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	3.55	Rating **	A/W	Issue No.		65 (cont)	
LM End	3.55	Issue Type +	Ma	Location *			
Category	Supplemental			Supplemental GPS Latitude/Longi			e/Longitude
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.12035	8 °	39.120358°	
пеш				-121.77977	5 °	-121.779775°	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51567 DS\_ID:16895 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culverst still being used as gravity drains for LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2103 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Flap gates in open position. Need to determine type of abandonment. Contact inspector to determine abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 3] 2 of 2: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 30 feet below the crown. Slide gate in concrete well on the landside (LS) shoulder. Wood flap gate and concrete headwall on the waterside (WS) end. Abandoned State pumping plant on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 966+30)].

FS Date: 4/13/2017 1:16:13 PM

# Photo 3 of 3: UCIP\_SP\_2018\_51567\_64817.jpg

Abandoned pumphouse and sump on LS toe.

### Rating \*\* Issue No. LM Start 4.81 Μ 26 Issue Type + Location 3 Ob LS LM End 4.81 Earthen Levee GPS Latitude/Longitude Category Start End 39.108110° Cracking 39.108110 Item -121.762623° -121.762623 DWR ID DWR\_ST0002\_01\_f \_ 2016\_26

### Comment Code

CR1: Monitor and have inspected by geotechnical engineer.

### Inspector Comment

Longitudinal cracks caused by fat clay.

### Photo 1 of 1: SP\_2018\_ST0002\_450\_26\_20180305\_00005.jpg



View of the longitudinal cracks.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	5.19	Rating **	М	Issue No.		45	
LM End	5.19	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Slope Sta	Slope Stability		39.10336	8°	39.103368 °	
пеш	item			-121.75876	o°	-121.758760 °	
DWR ID DWR_ST0002_01_s _ 2018_45							
Comment Code							

### Inspector Comment

Repair the slope damaged by vehicle traffic.

# Photo 1 of 1: SP\_2018\_ST0002\_450\_45\_20180403\_00076.jpg



View of the vehicle traffic along the waterside slope.

LM Start	7.47	Rating **	М	Issue No.		Issue No.		Issue No.		Issue No.		66
LM End	7.47	Issue Type +	En	Location *								
Category	Supplemental			GPS Latitude/Longitude								
Category				Start		End						
Item	DWR UC	DWR UCIP Field Study		39.072292 °		39.072292 °						
item		-121.744907 °		-121.744907 °								
DWR ID												

# Comment Code

### Inspector Comment

FS\_ID:51582 DS ID:19985 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 4/13/2017 1:56:50 PM

UCIP Comments: 4/11/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/10/2016 Crossing appears to be in good condition.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 No Permit identified for crossing. FIELD\_STRUCT\_DESC: Steel gas line of an unknown size crosses the levee at an unknown depth. Carsonite sign located on the waterside (WS) shoulder and at the landside (LS) toe across the toe ditch. Line is owned by Calpine Pipeline Company. No permit has been identified since crossing was field discovered in 2012.

Photo 1 of 3: UCIP\_SP\_2018\_51582\_65213.jpg



Gasline marker on WS shoulder.

### Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	7.47	Rating **	М	Issue No.		66 (cont)	
LM End	7.47	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/L			
Calegory	ory			Start		End	
Item	DWR UC	IP Field Study		39.0722	92°	39.072292	0
пеш				-121.7449	07°	-121.744907	0
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51582 DS\_ID:19985 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/10/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 No Permit identified for crossing. FIELD\_STRUCT\_DESC: Steel gas line of an unknown size crosses the levee at an unknown depth. Carsonite sign located on the waterside (WS) shoulder and at the landside (LS) toe across the toe ditch. Line is owned by Calpine Pipeline Company. No permit has been identified since crossing was field discovered in 2012. FS Date: 4/13/2017 1:56:50 PM

LM Start	7.47	Rating **	М	Issue No.	66 (cont)
LM End	7.47	Issue Type +	En	Location *	



Gasline marker on LS toe east of ditch.

### Photo 3 of 3: UCIP\_SP\_2018\_51582\_76970.jpg



Close up of marker

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency

Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

WS tude/Longitude End 39.067299°						
End						
° 39.067299°						
° -121.742851 °						
DWR ID DWR_ST0002_01_f _ 2016_34						
Comment Code						
Inspector Comment						
1						



View of the erosion along the waterside toe.

Rating \*\* A/W Issue No. LM Start 7.90 41 8.66 Issue Type + Ob Location \* LM End Supplemental GPS Latitude/Longitude Category 2017 Storm Damage 39.066360° 39.055830° Item -121.742320° -121.738090 ° DWR ID DWR ST0002 01 f 2017 41 Comment Code

# Inspector Comment

Levee Evaluation Comments

Description: Site ID No:175

Site Designation:FSRP-13-65

Repair Type: Seepage

Rating: Field Date: Notes: No Photos

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	8.14	Rating **	М	Issue No.		67	
LM End	8.14	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.06297	6°	39.062976 °	
пеш				-121.74102	7 °	-121.741027 °	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51583 DS\_ID:19984 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/10/2016 Crossing appears to be in good condition.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 No permit or purpose identified for this crossing.

FIELD\_STRUCT\_DESC: 2.5-inch steel pipe of an unknown purpose bored under the levee, at an unknown depth. Pipe has locked cap on the landside (LS) toe. Steel I-beam stream crossing on the LS toe marks the location of the pipe. Waterside (WS) marker of pipe crossing is not identified. No permit has been identified since crossing was field discovered in 2012.

FS Date: 4/13/2017 2:00:16 PM

LM Start	8.14	Rating **	М	Issue No.	67 (cont)
LM End	8.14	Issue Type +	En	Location *	

# Photo 1 of 2: UCIP\_SP\_2018\_51583\_65215.jpg



Pipe at steel i-beam crossing in ditch at LS toe.

### Photo 2 of 2: UCIP\_SP\_2018\_51583\_65214.jpg



Pipe at steel i-beam crossing in ditch at LS toe.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		68
LM End	10.28	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP Field Study		39.0335	22 °	39.033522°
пеш				-121.7289	27 °	-121.728927 °
DWR ID						

# Inspector Comment

Comment Code

FS\_ID:51620 DS\_ID:16884 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos updated. (DWR Sutter Yard- AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shouller is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD STRUCT DESC: 1 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:16:00 PM



Gasline markers on LS toe .

### Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		68 (cont)
LM End	10.28	Issue Type +	En	Location *		
Category	Suppleme	ental		e/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.03352	2 °	39.033522 °
пеш				-121.72892	7°	-121.728927 °
DWR ID						

# Comment Code

### Inspector Comment

FS\_ID:51620 DS\_ID:16884 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos updated. (DWR Sutter Yard- AFreitag) 10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shouller is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD STRUCT DESC: 1 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:16:00 PM

# Photo 2 of 3: UCIP\_SP\_2018\_51620\_65216.jpg



Gasline markers on WS shoulder.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		68 (cont)
LM End	10.28	Issue Type +	En	Location *		
Category	Supplemental			GPS La	titude	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.03352	22 °	39.033522°
пеш				-121.72892	27 °	-121.728927 °
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:51620 DS\_ID:16884 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos updated. (DWR Sutter Yard- AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shouller is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD STRUCT DESC: 1 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:16:00 PM



Damaged gas lines at the WS berm.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		69	
LM End	10.28	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitud		de/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.03351	9°	39.033519°	
пеш				-121.72892	26°	-121.728926 °	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51621 DS\_ID:16899 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos Updated. (DWR Sutter Yard- AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 2 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:17:33 PM



Gasline markers on LS toe.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		69 (cont)
LM End	10.28	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.03351	9°	39.033519
пеш				-121.72892	3°	-121.728926
DWR ID						

# Inspector Comment

Comment Code

FS\_ID:51621 DS\_ID:16899 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos Updated. (DWR Sutter Yard- AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 2 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:17:33 PM

# Photo 2 of 3: UCIP\_SP\_2018\_51621\_65218.jpg



Gasline markers on WS shoulder.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		69 (cont)
LM End	10.28	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory		Start		End		
Item	DWR UC	IP Field Study		39.0335	19°	39.033519°
пеш			,		26 °	-121.728926°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:51621 DS\_ID:16899 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos Updated. (DWR Sutter Yard- AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on WS broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 2 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:17:33 PM



Damaged gas lines at the WS berm.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		70	
LM End	10.28	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UC	IP Field Study		39.03351	7°	39.033517°	
пеш			•		5 °	-121.728925 °	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51622 DS\_ID:16900 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos updated. (DWR Sutter Yard-AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on Ws broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 3 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:24:51 PM



Gasline markers on LS toe.

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		70 (cont)		
LM End	10.28	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	IP Field Study		39.03351	7°	39.033517 °		
пеш				-121.72892	5°	-121.728925 °		
DWR ID								

# Comment Code

### Inspector Comment

FS ID:51622 DS\_ID:16900 EP NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos updated. (DWR Sutter Yard-AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on Ws broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 3 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:24:51 PM

# Photo 2 of 3: UCIP\_SP\_2018\_51622\_65223.jpg



Gasline markers on WS shoulder.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.28	Rating **	U	Issue No.		70 (cont)	
LM End	10.28	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UC	IP Field Study		39.0335	17°	39.033517°	
пеш				-121.72892	25 °	-121.728925 °	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51622 DS\_ID:16900 EP\_NO: 14455 Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 The damage to the levee toe was repaired by Sutter Maintenance Yard. The hole was filled in and compacted with rock. The repairs have not yet been made to the gas line by the gas line owners but the damage does not affect the integrity of the levee or bank. Photos updated. (DWR Sutter Yard-AFreitag)10/18/2016 it is unknown if the damage to the levee toe from the farmer getting his tractor stuck has been repaired (DWR UCIP - thatch) 10/10/2016 Crossing appears to be in good condition but im not sure if the damaged pipe section at the WS berm was ever repaired. (DWR Sutter Yard - afreitag)4/18/2016 Gas line was damaged at the WS berm due to a farmer getting his tractor stuck. Gas company is aware of the damage and will be doing repairs sometime this summer. Damage should not affect the integirty of the levee. (DWR Sutter Yard afreitag)5/7/2015 Marker on Ws broken. (DWR Sutter Yard afreitag)11/12/2014 Same as last inspection. (DWR Sutter Yard afreitag)5/13/2014 Same as last inspection. (DWR Sutter Yard afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)5/22/2013 Carsonite marker on WS shoulder is broken and should be replaced. (DWR Sutter Yard - afreitag) FIELD\_STRUCT\_DESC: 3 of 3: 4.5-inch steel natural gas pipeline through the levee, 2 feet below the crown. Pipes were placed in same trench, 1 foot apart. Gas line markers located on the landside (LS) toe and the waterside (WS) shoulder. Design drawings available in the permit. (Permit No. 14455, 1986 - Depco, Inc.). FS Date: 4/17/2017 2:24:51 PM



Damaged gas lines at WS berm.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	М	Issue No.		71	
LM End	10.83	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.02569	3°	39.025693 °	
пеш				-121.72689	5°	-121.726895 °	
DWR ID						·	

### Comment Code

### Inspector Comment

FS\_ID:51595 DS\_ID:16871 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Aabandoned.10/10/2016 Abandoned crossing.4/18/2016 Abandoned crossing but no noticeable issues seen with it.5/7/2015 Abandoned crossing but no noticeable issues with it.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment. FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 1 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterside (WS) end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].
FS Date: 4/13/2017 2:16:54 PM

LM Start	10.83	Rating **	М	Issue No.	71 (cont)
LM End	10.83	Issue Type +	Ma	Location *	



Slide gates on WS shoulder





Flap gates on WS toe.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	М	Issue No.		71 (cont)
LM End	10.83	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.02569	3°	39.025693 °
item				-121.72689	5 °	-121.726895 °
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:51595 DS\_ID:16871 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Aabandoned.10/10/2016 Abandoned crossing.4/18/2016 Abandoned crossing but no noticeable issues seen with it.5/7/2015 Abandoned crossing but no noticeable issues with it.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment. FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 1 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterside (WS) end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].
FS Date: 4/13/2017 2:16:54 PM

Photo 3 of 3: UCIP\_SP\_2018\_51595\_65249.jpg



Pumphouse/intake structure on LS toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	М	Issue No.	72			
LM End	10.83	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.02568	3°	39.025683 °		
пеш				-121.72688	6°	-121.726886 °		
DWR ID								

### Comment Code

### Inspector Comment

FS\_ID:51596 DS\_ID:16906 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Abandoned.10/10/2016 Crossing

appears to be in good condition. (DWR Sutter Yard -

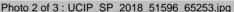
afreitag)4/18/2016 Abandoned crossing but no noticeable issues seen with it.5/7/2015 Abandoned crossing but no noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Determine type of abandonment. FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 2 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterside (WS) end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May

1953 (Station 582+19)]. FS Date: 4/13/2017 2:17:39 PM

LM Start	10.83	Rating **	М	Issue No.	72 (cont)
LM End	10.83	Issue Type +	Ma	Location *	



Slide gates on WS shoulder.





Flap gates on WS toe.

# **Levee Inspection Report By Mile - Spring 2018**

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	М	Issue No.		72 (cont)
LM End	10.83	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.02568	3°	39.025683°
пеш				-121.726886	s °	-121.726886°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:51596 DS\_ID:16906 EP\_NO: N/A

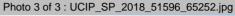
Repair Type: Non-Urgent Crossing Status: Found

FS Date: 4/13/2017 2:17:39 PM

UCIP Comments: 4/11/2017 Abandoned.10/10/2016 Crossing

afreitag)4/18/2016 Abandoned crossing but no noticeable issues seen with it.5/7/2015 Abandoned crossing but no noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Determine type of abandonment. FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 2 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterside (WS) end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

appears to be in good condition. (DWR Sutter Yard -





Pumping plant on LS toe.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	A/W	Issue No.	73		
LM End	10.83	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.02567	3°	39.025673 °	
item				-121.72687	3°	-121.726873 °	
DWR ID						·	

### Comment Code

### Inspector Comment

FS\_ID:51597 DS\_ID:16907 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Need to determine type of abandonment.

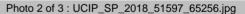
FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 3 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterside (WS) shoulder. Wood flap gate and concrete headwall on the WS end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

FS Date: 4/13/2017 2:18:31 PM

LM Start	10.83	Rating **	A/W	Issue No.	73 (cont)
LM End	10.83	Issue Type +	Ma	Location *	



Slide gates on WS shoulder.





Flap gates on WS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	A/W	Issue No.		73 (cont)	
LM End	10.83	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.0256	73 °	39.025673	٥
item				-121.7268	73 °	-121.726873	0
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51597 DS\_ID:16907 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Need to determine type of abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 3 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterside (WS) shoulder. Wood flap gate and concrete headwall on the WS end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

FS Date: 4/13/2017 2:18:31 PM

### Photo 3 of 3: UCIP\_SP\_2018\_51597\_65255.jpg



Pumphouse and intake on LS toe.

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	A/W	Issue No.		74		
LM End	10.83	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.02565	6°	39.025656 °		
item				-121.72687	8°	-121.726878 °		
DWR ID								

### Comment Code

### Inspector Comment

FS\_ID:51598 DS\_ID:16908 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.10/30/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment.5/22/2013 Concrete culvert is being used as gravity

drain for LS ditch.
FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 4 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterside (WS) shoulder. Wood flap gate and concrete headwall on the WS end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

FS Date: 4/13/2017 2:19:46 PM

LM Start	10.83	Rating **	A/W	Issue No.	74 (cont)
LM End	10.83	Issue Type +	Ma	Location *	



Slide gates on WS shoulder.

### Photo 2 of 3: UCIP\_SP\_2018\_51598\_65259.jpg



Flap gates on WS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	A/W	Issue No.		Issue No.		74 (cont)
LM End	10.83	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.02565	6°	39.025656 °		
item				-121.72687	8 °	-121.726878 °		
DWR ID								

### Comment Code

### Inspector Comment

FS\_ID:51598 DS\_ID:16908 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.10/30/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 4 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterside (WS) shoulder. Wood flap gate and concrete headwall on the WS end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

FS Date: 4/13/2017 2:19:46 PM

### Photo 3 of 3: UCIP\_SP\_2018\_51598\_65258.jpg



Pumphouse and intake on LS toe.

### Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.83	Rating **	A/W	Issue No.		75		
LM End	10.83	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P LMA Respo	onsibility	39.02563	9°	39.025639°		
item				-121.72687	4 °	-121.726874°		
DWR ID								

### Comment Code

### Inspector Comment

FS\_ID:51599 DS\_ID:16909 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Need to determine type of abandonment for pipe.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 5 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterside (WS) shoulder. Wood flap gate and concrete headwall on the WS end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

FS Date: 4/13/2017 2:20:32 PM

LM Start	10.83	Rating **	A/W	Issue No.	75 (cont)
LM End	10.83	Issue Type +	Ma	Location *	



Slide gates on WS shoulder.

### Photo 2 of 3: UCIP\_SP\_2018\_51599\_65262.jpg



Flap gates on WS Toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Ctt	10.83	Rating **	A/W	Issue No.		75 (cont)	
LM Start	10.03	realing	AVVV	13340 140.		75 (COIII)	
LM End	10.83	Issue Type +	Ma	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.0256	39°	39.025639	٥
пеш				-121.7268	74 °	-121.726874	۰
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:51599 DS\_ID:16909 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was removed but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.5/22/2013 Concrete culvert is being used as gravity drain for LS ditch.10/8/2012 Need to determine type of abandonment for pipe.

FIELD\_STRUCT\_DESC: \*ABANDONED\* [Pumping Plant No. 2] 5 of 5: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 31.5 feet below the crown. Slide gate in concrete well on the waterside (WS) shoulder. Wood flap gate and concrete headwall on the WS end. Wooden steps on the landside (LS) slope. Concrete steps on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 582+19)].

FS Date: 4/13/2017 2:20:32 PM

### Photo 3 of 3: UCIP\_SP\_2018\_51599\_65261.jpg



Pumphouse/intake on LS toe.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.84	Rating **	М	Issue No.		76	
LM End	10.84	Issue Type +	En	Location *			
Category	Supplemental Supplemental				GPS Latitude/Longitude		
Calegory	Category					End	
Item	DWR UC	DWR UCIP Field Study			0°	39.025560 °	
item			-121.72684	6°	-121.726846°		
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51600 DS\_ID:16872 EP\_NO: 3165

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Abandoned. 10/10/2016 Abandoned crossing. (DWR Sutter Yard - afreitag)4/18/2016 Abandoned crossing but no noticebale issues to report.5/7/2015 Abandoned crossing. No noticeable issues to report.11/12/2014 Same as last

inspection.5/13/2014 Same as last inspection.10/30/2013 Same as last inspection.5/22/2013 Same as last inspection.10/8/2012 Need to determine type of abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch drainage pipe through the levee, 2 feet below the crown. Siphon breaker in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Flap gate on the WS end. Minimalistic design drawings available. (Permit No. 3165, 1959 - State of California Department of Water Resources [DWR]). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 4/13/2017 2:21:21 PM

Photo 1 of 1: UCIP\_SP\_2018\_51600\_65264.jpg



Siphon breaker in 36-inch CMP riser on WS shoulder. Pipe visible at siphon breaker.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.85	Rating **	М	Issue No.		77
LM End	10.85	Issue Type +	En	Location *		
Category	Supplemental			GPS La	titud	e/Longitude
Calegory	Calegory					End
Item	DWR UC		39.0253	10°	39.025310°	
пеш				-121.7267	70°	-121.726770 °
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:51601 DS\_ID:19986 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 Crossing appears to be in good condition. (DWR Sutter Yard - AFreitag)10/10/2016 Crossing appears to be in good condition but there is no permit on file.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.5/13/2014 Same as last inspection.5/13/2013 Same as last inspection.10/9/2012 No permit identified for crossing.

FIELD\_STRUCT\_DESC: Gas pipeline of an unknown size or material crosses the levee, at an unknown depth. Carsonite signs on both the landside (LS) and the waterside (WS) shoulder. Pipeline is owned by Calpine Pipeline Company. No permit has been identified since crossing was field discovered in 2012. FS Date: 4/13/2017 2:21:49 PM

LM Start	10.85	Rating **	М	Issue No.	77 (cont)
LM End	10.85	Issue Type +	En	Location *	



Gasline marker on LS shoulder.

#### Photo 2 of 3: UCIP\_SP\_2018\_51601\_65265.jpg



Gasline marker on WS shoulder.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	10.85	Rating **	М	Issue No.		77 (cont)	
LM End	10.85	Issue Type +	En	Location *			
Category	Supplemental					e/Longitude	
Calegory	Category					End	
Item	DWR UC	DWR UCIP Field Study			10°	39.025310	0
пеш	item			-121.7267	70°	-121.726770	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51601 DS\_ID:19986 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/11/2017 Crossing appears to be in good condition. (DWR Sutter Yard - AFreitag)10/10/2016 Crossing appears to be in good condition but there is no permit on file.(DWR Sutter Yard - afreitag)4/18/2016 Crossing appears in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/12/2014 Same as last inspection.5/13/2014 Same as last inspection.5/13/2014 Same as last inspection.5/13/2013 Same as last inspection.10/9/2012 No permit identified for crossing.

FIELD\_STRUCT\_DESC: Gas pipeline of an unknown size or material crosses the levee, at an unknown depth. Carsonite signs on both the landside (LS) and the waterside (WS) shoulder. Pipeline is owned by Calpine Pipeline Company. No permit has been identified since crossing was field discovered in 2012.

FS Date: 4/13/2017 2:21:49 PM

# Photo 3 of 3 : UCIP\_SP\_2018\_51601\_76971.jpg



Close up of marker

LM Start	10.88	Rating **	М	Issue No.		1		
LM End	10.91	Issue Type +	Ма	Location *		WS		
Category	Supplemental				GPS Latitude/Longitude			
Category	Category			Start		End		
Item	2015 USACE Erosion Survey,			39.02483	5°	39.024399	0	
DRAFT				-121.72692	9°	-121.726808	0	
DWR ID DWR_ST0002_01_s _ 2016_1								
Commont Codo								

# Inspector Comment

2011 - Small section of the mid levee slope has eroded from wind wave. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: SBP\_11-1\_L]

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	12.75	Rating **	M	Issue No.		44	
LM End	12.75	Issue Type +	Ma	Location *	WS		
Earthen Levee				GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Encroachments			38.9986	98°	38.998698°	
nem			-121.718062 °		-121.718062 °		
DWR ID	DWR_ST0	002_01_s _ 201	8_44				
		Comn	nent Cod	le			
MA : Mate	rial						
Inspector Comment							
Remove th	Remove the tires from the water side slone and toe						

Photo 1 of 1: SP\_2018\_ST0002\_450\_44\_20180403\_00075.jpg

View of the tires along the waterside slope and toe.

Issue No. LM Start 12.94 Rating \*\* 78 12.94 Issue Type + Location \* LM End Fn Supplemental GPS Latitude/Longitude Category DWR UCIP Field Study 38.996304° 38.996304° Item -121.716290° -121.716290 ° DWR ID

#### Comment Code

#### Inspector Comment

FS\_ID:51602 DS\_ID:16883 EP\_NO: 15571

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/11/2017 Unable to locate. (DWR Sutter Yard - AFreitag)10/10/2016 Unable to locate.(DWR Sutter Yard -

afreitag)4/18/2016 Unable to locate.5/7/2015 Unable to locate.11/12/2014 Same as last inspection. Unable to

locate.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/23/2013 Same as last inspection. Unable to

locate.10/9/2012 Need to determine status of pipeline. Unable to

locate any markers in field.

FIELD\_STRUCT\_DESC: 10.75-inch steel gas pipeline through the levee, 2 feet below the crown. Pipeline was installed within the flowage area and both levees of the Sutter Bypass. Design drawings are available. (Permit No. 15571, 1990 - Hood Corporation).

FS Date: 4/13/2017 2:26:11 PM

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	13.34	Rating **	A/W	Issue No.	23			
LM End	13.34	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Slope Stability			38.9918	57°	38.991857 °		
item				-121.7115	55 °	-121.711555 °		
DWR ID	DWR ID DWR_ST0002_01_s _ 2015_23							
Comment Code								

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Repair the erosion along the waterside slope.



View of the vehicle erosion along the slope.

Photo 1 of 1: SP\_2018\_ST0002\_450\_39\_20180403\_00074.jpg

LM Start	13.83	Rating **	М	Issue No.	sue No. 39		
LM End	13.83	Issue Type +	Ma	Location *	WS		
Category	Earthen L		GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Encroach	ments		38.9873	53°	38.987353 °	
nem				-121.704613 °		-121.704613°	
DWR ID	DWR STO	002 01 s 201	8 39				

#### Comment Code

TR: Tree or limb

#### Inspector Comment

Remove the tree from the waterside slope and toe.



View of the tree along the waterside slope and toe.

LM Start	14.71	Rating **	М	Issue No.		37
LM End	14.71	Issue Type +	Ma	Location *		WS
Category	Earthen L		GPS La	titud	e/Longitude	
Calegory			Start		End	
Item	Slope Sta	bility		38.9793	89°	38.979389 °
пеш				-121.6919	23 °	-121.691923 °
DWR ID	DWR_ST0	002_01_f _ 2016	6_37			

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Repair the vehicle erosion along the waterside slope.



View of the erosion caused by vehicle traffic.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	14.71	Rating **	С	Issue No.		38	
LM End	14.71	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS La	titud	le/Longitude	
Calegory			Start		End		
Item	Animal Co	ontrol		38.97938	9°	38.979389°	
пеш				-121.69192	23°	-121.691923 °	
DWR ID	DWR_ST0	002_01_f _ 2016	5_38				
Comment Code							
A3 : No ro	A3 : No rodents visible, but rodent burrows visible; need to backfill and						

Inspector Comment

The rodent holes was repaired along the waterside slope.

compact or grout burrows.

No Photos

LM Start	14.71	Rating **	М	Issue No.		79	
LM End	14.71	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.97937	7 °	38.979377	0
iteiii				-121.69192	9 °	-121.691929	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51605 DS\_ID:16875 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Abandoned. (DWR Sutter Yard-AFreitag)10/10/2016 Abandoned crossing.(DWR Sutter Yard-afreitag)4/18/2016 Abandoned crossing.5/7/2015 Abandoned crossing. Needs to be properly abandoned.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/23/2013 Same as last inspection.10/9/2012 Pipe has not been abandoned properly. It should be removed from the levee section.

FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through the levee, 3.5 feet below the crown. Siphon breakers in 30-inch steel risers on both the waterside (WS) and the landside (LS) shoulders. Vertical pump on pile structure in stream (removed). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 377+10)].

FS Date: 4/13/2017 2:34:10 PM



Photo 1 of 3: UCIP\_SP\_2018\_51605\_65314.jpg

Pipe on WS slope exposed and crushed below 30-inch steel riser.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	14.71	Rating **	М	Issue No.		79 (cont)	
LM End	14.71	Issue Type +	En	Location *			
Catagony	Supplemental				atitud	le/Longitude	
Calegory			Start		End		
Item	DWR UC	IP Field Study		38.9793	77°	38.979377	0
пеш				-121.6919	29°	-121.691929	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51605 DS\_ID:16875 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Abandoned. (DWR Sutter Yard-AFreitag)10/10/2016 Abandoned crossing.(DWR Sutter Yard-afreitag)4/18/2016 Abandoned crossing.5/7/2015 Abandoned crossing. Needs to be properly abandoned.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.10/9/2012 Pipe has not been abandoned properly. It should be removed from the levee section.

FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through the levee, 3.5 feet below the crown. Siphon breakers in 30-inch steel risers on both the waterside (WS) and the landside (LS) shoulders. Vertical pump on pile structure in stream (removed). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 377+10)].

FS Date: 4/13/2017 2:34:10 PM

LM Start	14.71	Rating **	М	Issue No.	79 (cont)
LM End	14.71	Issue Type +	En	Location *	



Steel riser on LS shoulder.

#### Photo 3 of 3: UCIP\_SP\_2018\_51605\_65312.jpg



Crushed pipe on WS slope.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	17.60	Rating **	М	Issue No.		21	
LM End	17.60	Issue Type +	Ma	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Slope Sta	bility		38.94996	5°	38.949965 °	
пеш				-121.65382	3°	-121.653823 °	
DWR ID	DWR ID DWR_ST0002_01_s _ 2015_21						
	Comment Code						

S3: Repair the levee slope damaged by vehicle traffic and prevent

access where possible.

Inspector Comment

Repair the vehicle erosion along the waterside slope.



# Photo 1 of 2: SP\_2018\_ST0002\_450\_21\_20180305\_00002.jpg



View of the vehicle erosion along the waterside slope.

Photo 2 of 2: SP\_2018\_ST0002\_450\_21\_20180305\_00003.jpg



View of the vehicle erosion along the waterside slope.

LM Start	18.18	Rating **	Α	Issue No.		36	
LM End	18.18	Issue Type +	Ма	Location *	LS		
Category	evee	GPS La	tituc	le/Longitude			
Calegory	Category			Start		End	
Item	Vegetatio	n		38.9435	58°	38.943558 °	
item				-121.64688	35 °	-121.646885 °	
DWR ID	DWR_ST0	002_01_s _ 201	8_36				
Comment Code							
V1 : Contro	ol annual o	rass and wee	ds on th	e levee slop	es	and	

easements.

Inspector Comment

Native vegetation on both slopes are well maintained.



View of native vegetation on both slopes.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	A/W	Issue No.		80	
LM End	19.18	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	38.9324	76°	38.932476	٥
пеш				-121.6351	73 °	-121.635173	٥
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51609 DS\_ID:16877 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard - AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was abandoned but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last

inspection.5/23/2013 Concrete culvert is being used as gravity drain for LS ditch.10/9/2012 Determine type of abandonment for concrete culvert.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 1 of 3: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 26 feet below the crown. Slide gates in a concrete well on the waterside (WS) shoulder. Wooden flap gates and concrete headwall on the WS end. Concrete steps and staff gage reading to 53 feet on the WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 141+46)].

FS Date: 4/13/2017 2:44:23 PM

LM Start	19.18	Rating **	A/W	Issue No.	80 (cont)
LM End	19.18	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2018\_51609\_65326.jpg



Pumphouse on LS toe.

#### Photo 2 of 3: UCIP\_SP\_2018\_51609\_65325.jpg



Slide gates on WS shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	A/W	Issue No.		80 (cont)	
LM End	19.18	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	38.9324	76°	38.932476	0
пеш				-121.6351	73 °	-121.635173	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51609 DS\_ID:16877 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good condition. (DWR Sutter Yard - AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was abandoned but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.5/23/2013. Concrete culvert is being used as gravity drain in praction.5/23/2013. Concrete culvert is being used as gravity drain.

inspection.5/23/2013 Concrete culvert is being used as gravity drain for LS ditch.10/9/2012 Determine type of abandonment for concrete culvert.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 1 of 3: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 26 feet below the crown. Slide gates in a concrete well on the waterside (WS) shoulder. Wooden flap gates and concrete headwall on the WS end. Concrete steps and staff gage reading to 53 feet on the WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 141+46)].

FS Date: 4/13/2017 2:44:23 PM

## Photo 3 of 3: UCIP\_SP\_2018\_51609\_65327.jpg



Flap gates on WS toe.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	A/W	Issue No.		81
LM End	19.18	Issue Type +	Ma	Location *		
Category	Supplemental			GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	38.93246	9°	38.932469°
пеш				-121.63516	° 0	-121.635160 °
DWR ID						

# Comment Code Inspector Comment

FS\_ID:51610 DS\_ID:17027 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good Condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was abandoned but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last

inspection.5/23/2013 Concrete culvert is being used as gravity drain for LS ditch.10/9/2012 Determine type of abandonment for concrete culverts.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 2 of 3: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 26 feet below the crown. Slide gates in a concrete well on the waterside (WS) shoulder. Wooden flap gates and concrete headwall on the WS end. Concrete steps and staff gage reading to 53 feet on the WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 141+46)].

FS Date: 4/13/2017 2:47:22 PM

LM Start	19.18	Rating **	A/W	Issue No.	81 (cont)
LM End	19.18	Issue Type +	Ma	Location *	



Pumphouse on LS toe.

#### Photo 2 of 3: UCIP\_SP\_2018\_51610\_65329.jpg



Slide gates on WS shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	A/W	Issue No.		81 (cont)	
LM End	19.18	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UC	IP LMA Respo	nsibility	38.9324	69°	38.932469	0
Item				-121.6351	60°	-121.635160	0
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51610 DS\_ID:17027 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not abandoned. Good Condition. (DWR Sutter Yard- AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was abandoned but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last

inspection.5/23/2013 Concrete culvert is being used as gravity drain for LS ditch.10/9/2012 Determine type of abandonment for concrete culverts.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 2 of 3: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 26 feet below the crown. Slide gates in a concrete well on the waterside (WS) shoulder. Wooden flap gates and concrete headwall on the WS end. Concrete steps and staff gage reading to 53 feet on the WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 141+46)].

FS Date: 4/13/2017 2:47:22 PM

## Photo 3 of 3: UCIP\_SP\_2018\_51610\_65328.jpg



Flap gates on WS toe.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	A/W	Issue No.	82		
LM End	19.18	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Itom	DWR UC	IP LMA Respo	nsibility	38.93246	o°	38.932460 °	
Item				-121.63515	o°	-121.635150 °	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51611 DS\_ID:17028 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not Abandoned. Good Condition. (DWR Sutter Yard - AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was abandoned but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last

inspection.5/23/2013 Concrete culvert is being used as gravity drain for LS ditch.10/9/2012 Need to determine type of abandonment for concrete culverts.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 3 of 3: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 26 feet below the crown. Slide gates in a concrete well on the waterside (WS) shoulder. Wooden flap gates and concrete headwall on the WS end. Concrete steps and staff gage reading to 53 feet on the WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 141+46)].

FS Date: 4/13/2017 2:50:01 PM

LM Start	19.18	Rating **	A/W	Issue No.	82 (cont)
LM End	19.18	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2018\_51611\_65333.jpg



Pumphouse on LS toe.

#### Photo 2 of 3: UCIP\_SP\_2018\_51611\_65332.jpg



Slide gates on WS shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	A/W	Issue No.	82 (cont)		
LM End	19.18	Issue Type +	Ma	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UC	IP LMA Respo	onsibility	38.93246	o°	38.932460 °	
Item				-121.63515	°	-121.635150 °	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51611 DS\_ID:17028 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/11/2017 Not Abandoned. Good Condition. (DWR Sutter Yard - AFreitag)10/10/2016 NOT ABANDONED. The old pumpimg plant was abandoned but the culverts are still used as a gravity drain to regulate the water level in the LS ditch.(DWR Sutter Yard - afreitag)4/18/2016 Crossing is in good condition. The culvert is not abandoned and is used as gravity drain for the LS ditch into the bypass channel.5/7/2015 Concrete culvert is being used as a gravity drain for LS ditch.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last

inspection.5/23/2013 Concrete culvert is being used as gravity drain for LS ditch.10/9/2012 Need to determine type of abandonment for concrete culverts.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 3 of 3: 48-inch by 72-inch reinforced concrete drainage culvert through the levee, 26 feet below the crown. Slide gates in a concrete well on the waterside (WS) shoulder. Wooden flap gates and concrete headwall on the WS end. Concrete steps and staff gage reading to 53 feet on the WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 315, May 1953 (Station 141+46)].

FS Date: 4/13/2017 2:50:01 PM

## Photo 3 of 3: UCIP\_SP\_2018\_51611\_65331.jpg



Flap gate at WS toe.

## Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	19.18	Rating **	М	Issue No.	83	
LM End	19.18	Issue Type +	En	Location *		
Catagony	ental	GPS Latitude/Longitude				
Category				Start		End
Itom	DWR UC	IP Field Study		38.93242	23 °	38.932423 °
Item				-121.63508	35 °	-121.635085 °
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:51612 DS\_ID:16878 EP\_NO: 3165

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Abandoned. (DWR Sutter Yard-AFreitag)10/10/2016 Abandoned crossing. (DWR Suter Yard-afreitag)4/18/2015 Abandoned crossing. No noticeable issues to report.5/7/2015 Abandoned crossing. No noticeable issues to report.11/12/2014 Same as last inspection.5/14/2014 Same as last inspection.5/23/2013 Same as last inspection.10/30/2013 Same as last inspection.5/23/2013 Same as last inspection.10/9/2012 Need to determine type of abandonment. FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel drainage pipe through the levee, 4 feet below the crown. Siphon breaker in 36-inch corrugated metal pipe (CMP) riser unit on the waterside (WS) shoulder. Flap gate on the WS end. (Permit No. 3165, 1959 - State of California, Department of Water Resources [DWR]) [Additional Reference(s): DWR Levee Log, 2005].
FS Date: 4/13/2017 2:51:29 PM

Photo 1 of 1: UCIP\_SP\_2018\_51612\_65334.jpg

36-inch CMP riser on WS shoulder.

LM Start	20.02	Rating **	М	Issue No.		Issue No.		29	
LM End	20.02	Issue Type +	Ма	Location *		WS			
Category	GPS Latitude/Longitude								
Category		Start		End					
Slope Stability				38.9226	78°	38.922678	0		
Item		-121.6258	90°	-121.625890	0				
DWR ID	DWR_ST0002_01_f _ 2015_29								

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

#### Photo 1 of 1: SP\_2018\_ST0002\_450\_29\_20180305\_00006.jpg



View of the vehicle erosion along the waterside slope.

Thursday, May 31, 2018 09:37

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	20.34	Rating **	U	Issue No.		10	
LM End	20.34	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
			Start		End		
Item	Encroachments			38.918147°		38.918147°	
item			-121.624545 °		° -121.624545 °		
DWR ID	D DWR_ST0002_01_s _ 2012_10						
Comment Code							
BU : Building							
Inspector Comment							



View of the house next to the toe of the levee.

LM Start	20.43	Rating **	С	Issue No.	40		
LM End	20.43	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Animal Control			38.91696	65°	38.916965 °	
пеш				-121.62404	81°	-121.624048 °	
DWR ID	DWR_ST0002_01_f _ 2016_40						
Comment Code							

A1 : Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

The rodent holes was repaired along the landside slope.

## Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sutter Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.68	03/27/2018 03/27/2018	Bob Duffey

LM Start	21.29	Rating **	A/W	Issue No.		43		
LM End		Issue Type +	Ob	Location *			Ī	
Category	Supplemental			GPS Latitude/Longitude				
		Start		End				
Item	2017 Storm Damage			38.904832 °			0	
пеш					-121.620151 °		0	
DWR ID	DWR_ST0	002_01_f _ 2017	7_43					
		Comn	nent Cod	de				
							Ī	
		Inspecto	or Comm	nent				
Levee Eva	luation Co	mments					_	
Description	n:							
Site ID No	:174							
Site Desig								
Repair Typ	pe: Seepaç	ge						
Rating:								
Field Date	:							
Notes:								